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CONTEMPORARY INFORMATION TECHNOLOGIES IN EDUCATION

***Abstract.** The article is devoted to the use of IT in the educational process. First, it examines the effectiveness of the use of technology in teaching children and students, then compares the positive and negative aspects of computer testing and the creation of a unified information educational environment (EIOS).*

***Keywords:** IT, education system, information environment, computer control, test tasks, ICT.*

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СОВРЕМЕННЫЕ ИНФОРМАЦИОННЫЕ ТЕХНОЛОГИИ В ОБРАЗОВАНИИ

***Аннотация.** Статья посвящена использованию ИТ в образовательном процессе. Сначала в ней рассматривается эффективность использования технологий при обучении детей и студентов, далее сопоставляются положительные и отрицательные стороны проведения компьютерных*

тестирований и создание единой информационной образовательной среды (ЕИОС).

Ключевые слова: *информационные технологии, образовательная система, информационная среда, компьютерная проверка знаний, тестовые задания, информационно-коммуникативные технологии.*

Aim: to analyze the use of information technologies in educational process and to determine whether they need to be used or not.

- Tasks: 1) description of effectiveness of using information technologies;
2) necessity of computer tests and decision if the use of them justified;
3) convenience and necessity of information and education environment.

The last decade has brought us fast-growing information technologies and their penetration into all spheres of society. And education system is not an exception.

Modern IT which allows people to create, store, process information and provide effective ways to present it to the pupil, is a powerful tool for speeding up and improving the educational process. The specificity of the education system is dual. On the one hand, it is a consumer. On the other hand, it is a producer of the IT. It is important to note that technologies born in the education system are used far beyond its borders.

The effectiveness of the use of information technologies in education is determined by some factors:

- 1) the variety of forms of information presentation;
- 2) the high quality of visibility;
- 3) the ability to model a variety of processes under study;
- 4) it is a chance to release from routine work that distracts from the assimilation of the main content;
- 5) the possibility of conducting collective research work;
- 6) organization of operational control and assistance from the teacher.

The main forms and methods of teaching that contribute to improving the quality of education in the use of innovative technologies are role games, business games,

seminars, recapitulation, conferences, debates, dialogues, problem training, independent work, the protection of abstracts, individual work, creative essays, Reports, reports; Testing, programmed control, research work, etc.

The use of IT can replace many traditional educational tools. In many ways such a replacement is really very effective as it allows pupils to maintain interest in the subject. It also allows to create an information environment that stimulates the interest and curiosity of the child.

A significant role in the organization of the educational process has the control of the acquired level of knowledge and practical skills. In this process the control procedure performs the function of managing the educational process to develop the necessary correction of this process to obtain a high-quality level of the education of the student.

Conducting a computer control of students' knowledge is the basis for obtaining an objective independent assessment of the level of educational achievements (knowledge, intellectual and practical skills) of the student.

Under the computer control, we will understand a procedure that allows us to assess the level of assimilation and understanding of the material being studied to manage the current learning process and ensure individualization of learning in a computer environment.

Computer testing is a procedure for certification, establishing compliance with the personal knowledge model-the required standardized knowledge model.

Table 1. Advantages and disadvantages of the computer testing

Advantages	Disadvantages
<ul style="list-style-type: none"> • Independent assessment of knowledge • Instant result • Simplified comparison of students' knowledge level • Conservation of paper 	<ul style="list-style-type: none"> • Sporadic and random mistakes (typos, accidental clicking on the wrong answer) • Strict time limit

<ul style="list-style-type: none"> • A wide variety of tasks 	<ul style="list-style-type: none"> • Impossible to assess the depth of understanding and the logic of thought • Ability to guess the answer • The loss of the individual approach
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There are four main forms of test tasks:

- a closed form in which the test takers choose the correct answers from several suggested ones;
- open form, where the answers are given by the subjects themselves;
- for matching in the answer to which the elements of one set need to match the elements of another set;
- to establish the correct sequence, in which the sequence of actions of calculation operations required by the task is set.

Students and teachers of educational institutions should be prepared to operate with large information resources, to teach the mechanisms of squeezing and folding information from traditional and electronic information sources.

In the field of conducting scientific research within the higher education system, there is another important problem that cannot be ignored when forming appropriate ICT tools. This problem lies in the huge amount of constantly updated information that has recently appeared in humanity and the need to get acquainted with it both, teachers and students. Thanks to the emergence of the latest means of dissemination and exchange of information. such as the world computer network Internet information is becoming more and more every day. At the same time, the quality and content of information is one of the determining factors affecting the course of research activities in educational institutions.

Increasingly, scientists are discussing the creation of a unified information and educational environment for a country, district, region, or educational institution. First

of all, this will improve the quality of education, ensure the exchange of program and methodological materials, improve the professional level of teachers, create more favorable conditions for cooperation between teachers and attract students to creative activities.

The information and educational environment (IOS) is a multidimensional holistic socio-psychological reality that provides a set of necessary psychological and pedagogical conditions, modern teaching technologies and software and methodological teaching tools built on the basis of modern information technologies that provide support for cognitive activity and access to information resources.

It is customary to identify the following most important tasks and areas that can be solved when creating and further using the EIOS:

1. Application of network technologies of training as the basis of the modern model of education and testing it in practical pedagogical and scientific activities.

2. Creation of conditions for individualization of training and development of the individual, increase of democracy in obtaining education of various levels on the basis of modern information and educational technologies.

3. Activation of joint cooperation of the entire teaching staff of educational institutions of different levels and profiles for the development of modern computer-based learning tools

4. Improvement of the system of continuous professional development of teachers and university teachers working with information and network technologies.

5. Development of the creative potential of all participants in the educational process, holding scientific and practical conferences of schoolchildren, students, teachers and university teachers.

6. Conducting working meetings and seminars on issues of interest in the mode of video conferences and Internet Broadcasts.

7. Conducting surveys and questionnaires in various areas of pedagogical activity of all educational institutions and the education system as a whole.

Thus, we have analyzed the use of information technologies and how they create new opportunities for the transfer and perception of knowledge, assessment of the quality of education and comprehensive personal development.

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